

### Abstract of the Disclosure:

In order to generate a multiple of a unit  $U$ ,  $N$  times  $U$ , by a digital circuit is provided, where  $U$  is a rational number and  $N$  is a natural number, the method comprises the following steps (1) to (5). (1) Where  $A$ ,  $B$  and  $C$  are natural numbers,  $A > 1$ ,  $B > C$  and  $U = A + C/B$ , the values  $A$ ,  $B$  and  $C$  are stored. (2) A multiple of  $A$ ,  $N$  times  $A$ , and a multiple of  $C$ ,  $N$  times  $C$  are generated. (3) The multiple of  $C$  is compared with the denominator  $B$ . (4) The multiple of  $A$  is modified according to the result of the comparing step (3). (5) The modified multiple of  $A$  is output as the multiple of  $U$ .